

STATEMENT OF LEGAL AND FACTUAL BASIS
Significant Permit Modification

Virginia Electric and Power Company
Chesapeake Energy Center
2701 Vepco Street
Chesapeake, Virginia
Permit No. TRO-60163
Initial Permit Effective Date: November 25, 2002
Permit Modification Date: May 30, 2006
Expiration Date: December 31, 2007

As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Virginia Electric and Power Company has applied for a significant permit modification to the Federal Operating Permit (Article 3) for its Chesapeake Energy Center facility in Chesapeake, Virginia. The Department has reviewed the application and has prepared a modified Federal Operating Permit.

Engineer/Permit Contact: _____

Date: May 30, 2006

Air Permit Manager: _____

Date: May 30, 2006

Deputy Regional Director: _____

Date: May 30, 2006

Facility Information

Permittee

Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Facility

Chesapeake Energy Center
2701 Vepco Street
Chesapeake, Virginia 23320

Responsible Official

O. Preston Sloane
Station Director, Chesapeake Energy Center

Contact Person

Pamela F. Faggert
Vice President & Chief Environmental Officer
(804) 273-3467

AFS Identification Number: 51-550-00026

Facility Description (provided for informational purposes only): NAICS Code 221112 – Electrical Power Generation - Fossil. The facility combusts fossil fuels for the generation of electrical power. The facility produces electrical power using four (4) coal-fired steam generators and eight (8) combustion turbines. The four steam generating boilers are also capable of firing No. 2 fuel oil as a primary fuel. Additionally, Units 1 and 2 are capable of firing natural gas while Units 3 and 4 are capable of firing No. 6 fuel oil. Units 3 and 4 are also capable of evaporating boiler solvent cleaning solution. Units 1 and 2 have a close-coupled overfire air system to control NO_x emissions. This system will be replaced by a rotating overfire air (ROFA) system. Units 3 and 4 have selective catalytic reduction (SCR) systems and Unit 3 also has low NO_x burners. The NO_x control equipment on Units 1 through 4 is voluntary and is not required by permit or otherwise. These voluntary control devices may be replaced, or additional voluntary controls may be installed in the future. Listing the equipment in this permit does not trigger any state or federal requirements.

The eight combustion turbines are each capable of burning either natural gas or distillate fuel oil. In addition, the facility consists of coal and a fly ash handling systems. This facility is also an acid rain facility subject to Title IV of the Clean Air Act.

REQUESTED MODIFICATION

On July 29, 2005, the Department of Environmental Quality received a request dated July 29, 2005, to administratively amend the Federal Operating permit initially issued on November 25, 2002, and modified on May 11, 2004, and October 19, 2004. The request was to amend Section IV, Condition 46 of the Federal Operating permit to clarify that the fugitive dust emission limitations in that condition apply to Units 1 and 2 only. Condition 46 originates from Condition 13 of the facility's PSD permit dated October 20, 1998. The PSD permit only applies to Units 1 and 2. However, Federal Operating Permit Condition 46 appears to impose a limit on PM-10 for the entire facility's coal handling/storage.

In addition, on September 22, 2005, the Department of Environmental Quality received a request dated September 20, 2005, to incorporate the provisions of the facility's synthetic fuel (Syn Fuel) plant. Virginia Electric and Power Company received a minor new source review (NSR) permit for the Syn Fuel Plant to be located at the Chesapeake Energy Center on October 15, 2004. The facility notified DEQ that the facility had commenced operation on October 25, 2004. In accordance with 9 VAC 5-80-430.C.4, the facility is obligated to submit an application to incorporate these new NSR permit conditions into the facility-wide Title V permit within 12 months of commencing operation of any new operations. Since the request to incorporate such conditions was received by DEQ on September 22, 2005, the facility has met its requirement to submit an application within 12 months of commencement of Syn Fuel Plant operations. This incorporation of Syn Fuel Plant conditions constitutes a Title V significant modification to the October 19, 2004, Title V permit.

REASON FOR MODIFICATION

Since both requests were received at DEQ around the same timeframe, it was determined that both actions should be combined into one action. Since the Syn Fuel Plant NSR permit included the establishment of a case-by-case emission limitation or standard and did not undergo public notice, its incorporation into the Title V permit is being handled as a significant modification as specified in 9 VAC 5-80-230. Public notice is required as required pursuant to 9 VAC 5-80-590.D.

CAM APPLICABILITY

This significant permit modification does not trigger CAM review. As specified in Table 1-1 of the CAM Technical Guidance Document, only units with add-on controls are subject to CAM. In addition, CAM does not apply to facilities that submitted complete initial Title V applications to DEQ prior to April 20, 1998. For these facilities, CAM plans for affected units are due with the facility's Title V permit renewal application unless a significant modification takes place on a CAM-affected unit that affects a CAM-specific pollutant. As specified in Section 1.2.2, page 1-14 of the CAM Technical Guidance Document:

Deadlines for CAM submittals are addressed in §64.5. In specifying submittal deadlines, the CAM rule distinguishes

between large emissions units and other units. Large units are those with the (post-control) potential to emit the applicable pollutant at least 100 percent of the major source amount. Beginning April 20, 1998, owners or operators of large units that are subject to Part 64 must submit the required information as part of the application of a Part 70 or 71 permit if, by that date, the application has not been filed or has not yet been determined to be complete. In addition, beginning that same date, if the owner or operator of a large unit is required to submit a significant permit revision for that unit, the CAM submittal for that unit must be submitted as part of the permit revision application. For all other large units and for all other affected emission units, CAM submittals are to be included with the renewal of the Part 70 or 71 permit for the unit.

The initial Title V application for the Chesapeake Energy Center was submitted and deemed complete prior to April 20, 1998. Therefore, CAM only applies at this time to significant modifications to CAM-affected units relating to CAM-specific pollutants. The requested significant modification does not contain any CAM-affected units (none with post-control PTE equal to or greater than 100% of the major source threshold). Therefore, this Title V significant modification does not trigger the requirement to submit a CAM plan.

APPLICABILITY OF 9 VAC 5-80-590

Significant permit modification procedures are used for those permit modifications that "require or change a case-by-case determination of an emission limitation or other standard..." The Syn Fuel Plant NSR permit establishes new emission limitations or other standards.

CHANGES TO FEDERAL OPERATING PERMIT

Condition 46 of the Title V (Article 3) permit modified on October 19, 2004, has been modified to clarify that the PM-10 emission limitations of 6.4 lbs/hour and 3.0 tons/year (12-month rolling average) apply to the fugitive dust emissions from coal handling/storage for Units 1 and 2 only.

New Section VI, Conditions 58 through 77 reflect the incorporation of Conditions 2 through 10, 12 through 15, 17 through 19, 21, and 23 through 25 of the October 15, 2004, Syn Fuel Plant NSR permit. Conditions 11 and 16 from the October 15, 2004, Syn Fuel Plant NSR permit are State-Only conditions and have been referenced as such in the State-Only Enforceable Requirements section of the Title V permit (Section XII). In addition, Condition 20 (Initial Visible Emissions Evaluation) and Condition 26 (Initial Notifications) of the October 15, 2004, Syn Fuel Plant NSR permit have been satisfied and therefore have not been carried forward to the Title V permit.

PUBLIC PARTICIPATION

Public notice date: April 13, 2006
Draft to EPA date: April 12, 2006
Public comments: None
EPA comments: None
Proposed permit to EPA date: April 12, 2006
EPA comments: None